

CLAIMS

1. A laser-weldable resin label which comprises at least a resin layer and is affixable to a resin shaped article by a laser welding, wherein the resin layer has a light-scattering property, and the transmittance of the resin layer relative to a laser beam having an oscillation wavelength within the range of 740 to 1100 nm is not less than 20%, the total light transmittance of the resin layer relative to a visible light in accordance with ASTM D1003 is not more than 50%, and the haze value of the resin layer in accordance with ASTM D1003 is not less than 70%.

2. A laser-weldable label according to claim 1, which has a thickness of 50 μ m to 5 mm.

3. A laser-weldable label according to claim 1, wherein the resin layer comprises a thermoplastic resin.

4. A laser-weldable label according to claim 1, which comprises the resin layer alone.

5. A laser-weldable label according to claim 1, wherein the resin layer comprises a thermoplastic resin which has a compatibility with a resin constituting the resin shaped article.

6. A laser-weldable label according to claim 1, wherein the resin layer is capable of masking the resin shaped article, and is colored into a chromatic color or an achromatic color.

7. A laser-weldable label according to claim 1,

which comprises a printed layer formed on the surface thereof,
wherein the printed layer has a display function.

8. A laser-weldable label according to claim 7,
wherein the printed layer comprises a coloring agent having
5 a transmitting property relative to a laser beam.

9. A laser-weldable label according to claim 1,
which comprises the resin layer and a laser-absorbing part
formed on a surface of the resin layer, wherein the label
is weldable to the resin shaped article by irradiating a
10 laser beam on a contact surface of the laser-absorbing part
with the resin shaped article.

10. A laser-weldable label according to claim 9,
wherein the absorbing part is a laser-absorbing layer which
is formed on a surface of the resin layer, and the thickness
15 of the absorbing layer is 1 to 40 μm .

11. A laser-weldable label according to claim 9
or 10, wherein the absorbing part is a laser-absorbing layer
formed by a layer containing a laser beam absorbent.

12. A shaped composite article which comprises a
20 resin shaped article and a laser-weldable label recited
in any one of claims 1 to 11, wherein the label is bonded
to the resin shaped article by a laser welding.

13. A shaped composite article according to claim
12, wherein the resin shaped article comprises a laser
25 beam-absorbing part formed on at least part of a surface
thereof, and the label is bonded to the resin shaped article
by irradiating a laser beam on the contact surface of the

absorbing part with the label.

14. A shaped composite article according to claim
13, wherein the absorbing part comprises a laser-absorbing
layer, and the thickness of the absorbing layer is 1 to
5 40 μm .

15. A shaped composite article according to claim
13 or 14, wherein the absorbing part comprises a
laser-absorbing layer, and the absorbing layer is formed
from a layer containing a laser beam absorbent.

10 16. A shaped composite article according to any
one of claims 12 to 15, wherein the resin shaped article
is a toner cartridge.